

GenCore version 4.5  
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## OM protein - protein search, using sw model

Run on: January 7, 2002, 15:49:08 ; Search time 101.88 Seconds  
(without alignments)  
34.394 Million cell updates/sec

Title: US-08-569-749-7

Perfect score: 269

Sequence: 1 LARAGFYITGPDRVACFCAC.....WEPRDAMSEHRHFPNCP 46

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 219241 segs, 76174552 residues

Total number of hits satisfying chosen parameters: 219241

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :  
1: PIR:68:\*  
2: PIR1:\*  
3: PIR2:\*  
4: PIR3:\*  
5: PIR4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	269	100.0	618	2 S68450	apoptosis inhibito
2	256	95.2	358	2 JCS964	apoptosis inhibito
3	251	93.3	604	2 S68449	apoptosis inhibito
4	192	71.4	497	2 S69544	apoptosis inhibito
5	149	55.4	1232	2 A55478	neutonal apoptosis
6	140	52.0	496	2 S68452	apoptosis inhibito
7	140	52.0	497	2 S69545	apoptosis inhibito
8	138	51.3	1447	2 T42628	neutonal apoptosis
9	133.5	49.6	4845	2 T31067	RIR repeat contain
10	132	49.1	268	2 T10304	inhibitor of apopt
11	132	49.1	268	2 A53989	apoptosis-inhibiti
12	127	47.2	298	3 UC7568	Kidney inhibitor o
13	124	46.1	275	2 A45679	inhibitor of apopt
14	117	43.5	208	2 T03183	probable apoptosis
15	111	41.3	150	2 T28409	apoptosis inhibito
16	107	39.8	155	2 T30489	apoptosis inhibito
17	104	38.7	997	2 T43523	cutl1 protein - fi
18	98	36.4	292	2 T41772	IAP1 or127 - Bomby
19	96	35.7	286	2 D36828	or13 protein - Au
20	93	34.6	275	2 T10310	apoptosis-inhibiti
21	80	29.7	249	2 H72858	apoptosis-inhibito
22	80	29.7	249	2 T41814	apoptosis-inhibito
23	72	26.8	155	2 T37471	IMP2 or171 - Bomby
24	66.5	24.7	329	2 T28403	apoptosis inhibito
25	63.5	23.6	278	1 S25690	ORF MSV42 probabl
26	63	23.4	234	2 T30427	hupf protein - Rho
27	63	23.4	234	2 T30427	probable apoptosis
28	58.5	21.7	284	2 A41382	apoptosis inhibito
29	57	21.2	122	2 S09314	UTP-glucose-1-pho phospholipase A2 (

30	57	21.2	138	2 E48188	phospholipase A2 (
31	56.5	21.0	181	2 E36794	hypothetical prote
32	56	20.8	2111	2 T15390	hypothetical prote
33	55	20.4	357	2 T50696	DNA primase small
34	55	20.4	409	2 S72438	phosphatidylserine
35	55	20.4	838	2 A48440	fltn-infected eryt
36	54.5	20.3	424	2 E30857	hypothetical prote
37	54.5	20.3	424	2 T10400	alkaline exonuclos
38	54.5	20.3	517	1 D37821	phenol 2-monooxyge
39	54	20.1	335	2 C64548	conserved hypothec
40	54	20.1	335	2 G71938	hypothetical prote
41	54	20.1	954	2 S57108	hypothetical prote
42	54	20.1	1004	2 TH0470	Na+/K+-exchanging
43	53.5	19.9	297	2 T33905	protein transport
44	53.5	19.9	525	1 S39834	myb-related protei
45	53.5	19.9	5825	2 T12117	polyprotein - lava

## ALIGNMENTS

RESULT 1  
S68450  
apoptosis inhibitor hiap-2 - human  
C:Species: Homo sapiens (man)  
C:Date: 17-Jul-1998 #sequence\_revision 17-Jul-1998 #text\_change 21-Jul-2000  
C:Accession: S68450  
R:Liston, P.; Roy, N.; Tamai, K.; Lefebvre, C.; Baird, S.; Cherton-Horvat, G.; Faraha  
Nature 379, 349-353, 1996  
A:Title: Suppression of apoptosis in mammalian cells by Nalp and a related family of  
A:Reference number: A58182; M01D:56149249  
A:Accession: S68450  
A:Status: nucleic acid sequence not shown  
A:Molecule type: mRNA  
A:Residues: 1-618 <115>  
A:Cross-references: EMBL:U45879; NID:q1184317; PIDN:MAC50372.1; PID:q1184318  
C:Function:  
A:Description: apoptotic suppressor  
C:Superfamily: RING finger homology  
C:Keywords: apoptosis; zinc finger  
F:567-611/Domain: RING finger homology <RNG>

Query Match 100.0%; Score 269; DB 2; Length 618;  
Best Local Similarity 100.0%; Pred. No. 1.4e-25;  
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 LARAGFYITGPDRVACFCACGKLSWEPKRDAMSEHRHFPNCP 46  
DB 204 LARAGFYITGPDRVACFCACGKLSWEPKRDAMSEHRHFPNCP 249

RESULT 2  
JC9364  
apoptosis inhibitor - pig  
C:Species: Sus scrofa domestica (domestic pig)  
C:Date: 04-Sep-1998 #sequence\_revision 04-Sep-1998 #text\_change 02-Sep-2000  
C:Accession: JC9364  
R:Stehlik, C.; de Martin, R.; Binder, B.R.; Lipp, J.  
Biochem. Biophys. Res. Commun. 243, 827-832, 1998  
A:Title: Cytokine induced expression of porcine inhibitor of apoptosis protein (Iap)  
A:Reference number: JC9364; M01D:98162622  
A:Accession: JC9364  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-358 <STR>  
A:Cross-references: GB:U9142; NID:92957174; PIDN:MAC39171.1; PID:92957175  
C:Superfamily: RING finger homology  
F:307-351/Domain: RING finger homology <RRN>

Query Match 95.2%; Score 256; DB 2; Length 358;  
Best Local Similarity 93.5%; Pred. No. 3.4e-24;



Query Match 52.0%; Score 140; DB 2; Length 496;  
Best Local Similarity 51.1%; Pred. No. 1.1e-09;  
Matches 23; Conservative 6; Mismatches 16; Indels 0; Gaps 0;

1 LARAGFYTGDRVACACGKLSNMEPKDAMSEHRRHPCPF 45  
131 LAKAGFYTLRLDHWKVCWCGVYAKMEKNDAFEHRRFPQCP 125

RESULT 7  
569545  
apoptosis inhibitor IAP homolog - fruit fly (Drosophila melanogaster)  
C:Species: Drosophila melanogaster  
C:Date: 06-Dec-1996 #sequence\_revision 13-Mar-1997 #text\_change 21-Jan-2000  
C:Accession: S69545  
R:Docter, C.S.; Nara, V.E.; Gedrich, R.W.; Clem, R.J.; van Dongen, J.L.; Gillfillan, M.C.  
EMBL J. 15, 2685-2694, 1996  
A:Title: A conserved family of cellular genes related to the baculovirus IAP gene and er  
A:Reference number: S69544; MUID:96256286  
A:Accession: S69545  
A:Status: preliminary; nucleic acid sequence not shown  
A:Molecule type: mRNA  
A:Residues: 1-497 <DUC>  
A:Cross-references: EMBL:U03273; NID:q1019116; PIDD:MAC47155.1; PTD:q1019117  
C:Genetics:  
A:Gene: IIP  
C:Superfamily: apoptosis inhibitor IAP homolog; RING finger homology  
F:446-490/Domain: RING finger homology <RRN>

Query Match 52.0%; Score 140; DB 2; Length 497;  
Best Local Similarity 51.1%; Pred. No. 1.1e-09;  
Matches 23; Conservative 6; Mismatches 16; Indels 0; Gaps 0;

1 LARAGFYTGDRVACACGKLSNMEPKDAMSEHRRHPCPF 45  
131 LAKAGFYTLRLDHWKVCWCGVYAKMEKNDAFEHRRFPQCP 177

RESULT 8  
742628  
neuronal apoptosis inhibitory protein 2 - mouse  
C:Species: Mus musculus (house mouse)  
C:Date: 11-Jan-2000 #sequence\_revision 11-Jan-2000 #text\_change 11-Jan-2000  
C:Accession: T42628  
R:Varaghi, Z.; Diez, E.; Gros, P.; Mackenzie, A.  
Mamm. Genome 10, 761-763, 1999  
A:Title: CDNA cloning and the 5' genomic organization of Naip2, a candidate gene for mur  
A:Reference number: 222179; MUID:99315342  
A:Accession: T42628  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-1447 <YAR>  
A:Cross-references: EMBL:AF102871; NID:g3860228; PTD:g3860229; PIDD:MAC73002.1  
C:Genetics:  
A:Gene: Naip2

Query Match 51.3%; Score 138; DB 2; Length 1447;  
Best Local Similarity 52.2%; Pred. No. 5.1e-09;  
Matches 24; Conservative 4; Mismatches 18; Indels 0; Gaps 0;

1 LARAGFYTGDRVACACGKLSNMEPKDAMSEHRRHPCPF 46  
181 LSAAGFVFTGDRDVTGCFSCGCGCLANWESDDPMKEAKKFPKCF 226

RESULT 9  
731067  
ATR repeat containing ubiquitin-conjugating enzyme BRUCE - mouse  
C:Species: Mus musculus (house mouse)

C:Date: 22-Oct-1999 #sequence\_revision 22-Oct-1999 #text\_change 21-Jul-2000  
C:Accession: T31067  
R:Hauser, H.P.; Bardroff, M.; Pyrowolakis, G.; Jentsch, S.  
J. Cell Biol. 141, 1415-1422, 1998  
A:Title: A giant ubiquitin-conjugating enzyme related to IAP apoptosis inhibitors.  
A:Reference number: 220963; MUID:98292517  
A:Accession: T31067  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-4845 <HAU>  
A:Cross-references: EMBL:Y17267; NID:g3319989; PIDD:CAA76720.1; PTD:g3319990  
A:Note: localized to the Golgi compartment and the vesicular system  
C:Keywords: membrane-associated protein

Query Match 49.6%; Score 133.5; DB 2; Length 4845;  
Best Local Similarity 51.0%; Pred. No. 5.7e-08;  
Matches 25; Conservative 4; Mismatches 17; Indels 3; Gaps 1;

1 LARAGFYTGDRVACACGKLSNMEPKDAMSEHRRHPCPF 46  
284 MAAGFYTHOPASSGDNRACMCCTCYCLVCMETDEPMSHBNHPCPF 332

RESULT 10  
710304  
inhibitor of apoptosis protein 3 - Orgyia pseudotsugata nuclear polyhedrosis virus  
C:Species: Orgyia pseudotsugata nuclear polyhedrosis virus, OPMNPV  
C:Date: 16-Jul-1999 #sequence\_revision 16-Jul-1999 #text\_change 15-Sep-2000  
C:Accession: T10304  
R:Ahrens, C.A.; Russell, R.R.; Funk, C.J.; Evans, J.; Harwood, S.; Rohmann, G.F.  
Virology 229, 381-399, 1997  
A:Title: The sequence of the Orgyia pseudotsugata multinnucleocapsid nuclear polyhedro  
A:Reference number: 211011; MUID:97271300  
A:Accession: T10304  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: DNA  
A:Residues: 1-268 <AHR>  
A:Cross-references: EMBL:U075930; NID:g2934903; PIDD:MAC59034.1; PTD:q1911281  
C:Superfamily: viral apoptosis inhibitor IAP; RING finger homology  
F:217-261/Domain: RING finger homology <RRN>

Query Match 49.1%; Score 132; DB 2; Length 268;  
Best Local Similarity 45.7%; Pred. No. 5.9e-09;  
Matches 21; Conservative 6; Mismatches 19; Indels 0; Gaps 0;

1 LARAGFYTGDRVACACGKLSNMEPKDAMSEHRRHPCPF 46  
132 LAAGFYTGQDKTRCCKDGLKMEPKDAPMOOHARWDRCEY 177

RESULT 11  
A53989  
apoptosis-inhibiting protein - Orgyia pseudotsugata multinnucleocapsid nuclear polyhedrosis  
C:Species: Orgyia pseudotsugata multinnucleocapsid nuclear polyhedrosis virus, OPMNPV  
C:Date: 15-Oct-1994 #sequence\_revision 15-Oct-1994 #text\_change 15-Sep-2000  
C:Accession: A53989  
R:Birdsall, M.J.; Clem, R.J.; Miller, L.K.  
J. Virol. 68, 2521-2528, 1994  
A:Title: An apoptosis-inhibiting gene from a nuclear polyhedrosis virus encoding a po  
A:Reference number: A53989; MUID:94187094  
A:Accession: A53989  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-268 <BIR>  
A:Cross-references: GB:U22564; NID:q456111; PIDD:AA902610.1; PTD:g456114  
A:Note: authors translated the codon TGG for residue 28 as Tyr, GAC for residue 50 as  
C:Superfamily: viral apoptosis inhibitor IAP; RING finger homology  
F:217-261/Domain: RING finger homology <RRN>

Query Match 49.1%; Score 132; DB 2; Length 268;



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